

Agricultural Nutrient Trading in Maryland Program Development

John Rhoderick
Maryland Department of Agriculture

Nutrient Trading – What is it?

- Not a replacement for NRCS or MDA conservation programs
- A new revenue stream that can compliment current conservation programs
- A voluntary option that can further environmental improvement
- Develop new options at a lower cost

Nutrient Trading

A program to provide to Maryland farmers a payment for conservation practices. The practices provide offsets to address new or increased loads associated with a growing population.

- Point Source to Non-Point Source (WWTP and Agriculture)



Buyer

Compensation (\$)

Nutrient
Credits



Seller

Nutrient Trading – Where are we to date?

- Seventeen states have adopted a trading program for environmental improvement
- All states in the Chesapeake Bay watershed have a trading program including the surrounding states that have interstate watershed boundaries with Maryland
- Maryland's Phase 1 Policy for Point to Point Source Trading has begun as of March 2008
- Phase II – Non-Point Source Agricultural Trading proposed for Adoption – June 2009

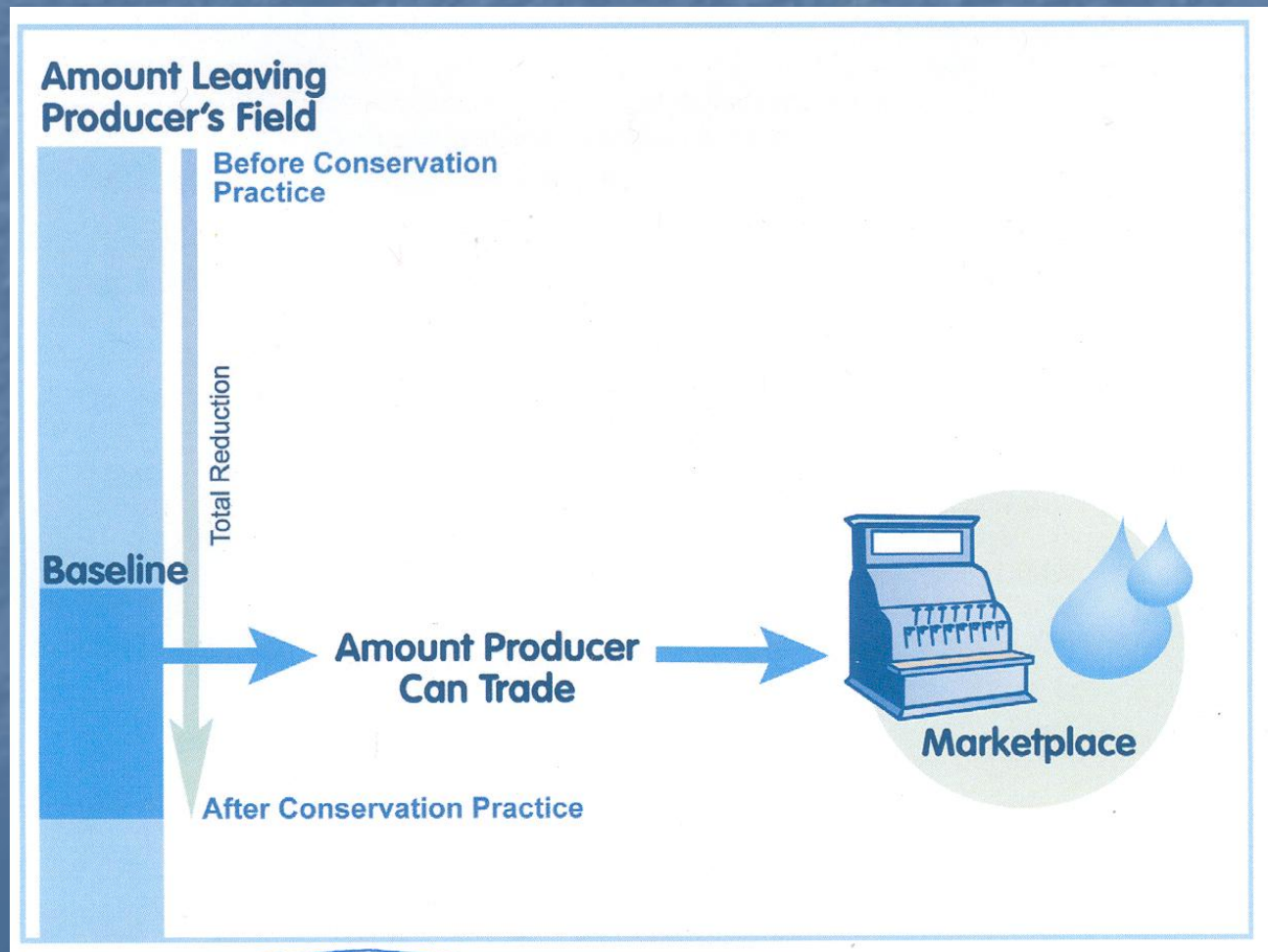
Maryland's Trading Program – Agricultural

- Two Key Elements
 - Generation of Agricultural Credits
 - Exchange of Agricultural Credits

Guidelines for Generation of Agricultural Credits

- Assessing Credit Generation Potential
- Understanding and identifying baselines
- Calculating Potential Credits
- Certification and Approval of Credits

Determining How Much a Producer Can Trade



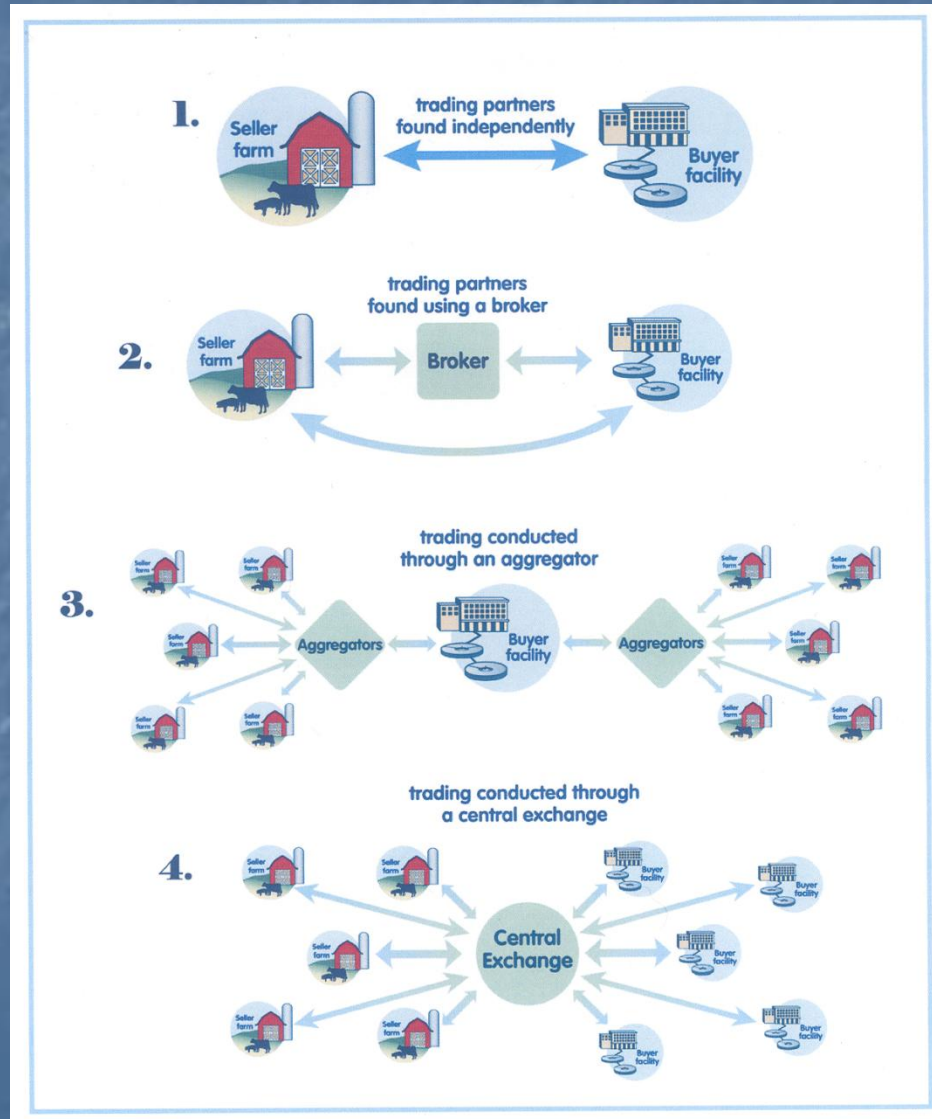
Agricultural Non Point Source Options for Generating Credits

- Agronomic practices
 - Cover crops
 - Precision feeding
 - Reduced fertilizer application
 - Manure incorporation
 - Manure export
 - Cropland conversion
- Structural BMPs
 - Riparian buffers
 - Water control structures
 - Livestock fencing
 - Buffers

Guidelines for the Exchange of Non Point credits

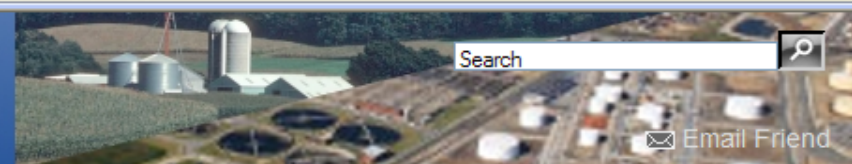
- How to purchase credits
 - Market place
 - Registry
 - Contracts
- Approval
- Implementing a BMP
- Verification, Inspection

Finding a Trading Partner



Non Point Source Program Structure

- Utilizing a web based nutrient trading application with tools to calculate eligibility and credit potential
- Provides for nitrogen and phosphorus credit calculation from agricultural sources
- Provides a separate market place for buyers and sellers of approved credits to post and exchange information on credit quantity and price
- Provides a registry to track and register trades



Welcome To Maryland's Nutrient Trading Program . . .

Office of the
GOVERNOR



Over the years, pollution levels in the Chesapeake Bay have been increasing. Chief among these pollutants were nutrients, nitrogen and phosphorus. These substances were entering the Bay from direct discharges (or point sources) as well as from diffuse sources (nonpoint sources) such as urban and agricultural runoff, along with atmospheric deposition. In order to protect the Bay's living resources it is necessary to drastically reduce the amount of nutrients entering into the Bay. Much has already been done to reduce these pollutants with the development of Maryland's Tributary Strategies, but more is still needed. An innovative approach to help achieving these reduction goals is nutrient trading. For several years, the Maryland Department of the Environment as lead agency for the state has been developing a nutrient trading policy.

This policy has been developed in two phases. In January 2008, the Maryland Department of the Environment (MDE) finalized a document entitled "Maryland Policy for Nutrient Cap Management And Trading In Maryland's Chesapeake Bay Watershed". The MDE effort represented the initial phase of the State's policy development on nutrient trading. The MDE document outlines the procedures for trading between point sources (WWTP's). In April 2008, the Maryland Department of Agriculture (MDA) finalized a draft set of documents that represents the next phase of Maryland's nutrient trading program. This next phase of the program relates to generating credits for trading agricultural non-point sources with point sources and other interested buyers. These documents are available in the reference section on this page. To facilitate trading, a market has been established. This market place will

Enter the Trading Site

- [Login](#)
- [Nitrogen Marketplace](#)
- [Phosphorous Marketplace](#)
- [Completed Trades](#)
- [View the Registry](#)

Technical References & Guidelines

- [Nutrient Credit Generation](#)
- [Nutrient Credit Exchange](#)
- [Policy For Nutrient Cap Management and Trading](#)

Farmers . . .

- [Interested in nutrient trading?](#)



http://www.mdnutrienttrading.org/



Google



File Edit View Favorites Tools Help



MDNUTRIENTTRADING.ORG



Home



Feeds (1)



Page



Tools



MARYLAND

NUTRIENT TRADING

[Problem Solver](#) | [Maryland.gov](#) | [Online Services](#) | [State Agencies](#) | [Phone Directory](#)

Search

Search

Email Friend

Why become part of the Nutrient Trading Program?

... Because it makes economic cents!

As part of the Chesapeake Bay Restoration Program, Maryland has agreed to drastically reduce the amount of nutrients (nitrogen and phosphorous) entering the Bay. Limits on the amount of nutrients that will be allowed in the state's rivers have been established in Maryland's Tributary Strategies. To achieve their requirements under the Tributary Strategies, wastewater treatment plants will be required to reduce their discharges to state of the art technology and to maintain those levels. New dischargers and existing dischargers of any size that want to grow beyond these Tributary Strategy nutrient loading limits will have to do so through other mechanisms. One of these mechanisms is acquiring nonpoint source discharge credits.

The agricultural community has a similar requirement to reduce nutrient discharges from their operations to levels identified in the Tributary Strategies. By a combination of Best Manage Practices (BMPs), farmers can meet this requirement ... and then some. The extra pounds of nitrogen and phosphorous that can be generated by implementing additional BMPs can be sold as credits to those wastewater treatment plans needing additional nutrient reductions to offset their increased load. By selling these credits, nutrient trading can be a source of new revenue for farmers.

Click on the video to learn more about the benefits of becoming an agricultural seller

- [Maryland Nutrient Trading HOME](#)

For More information Contact:

John Rhoderick
MD Department of Agriculture
Office of Resource Conservation
Phone: 410-841-5876
E-mail: rhoderjc@mda.state.md.us

OR

Your Local Soil Conservation
District Office
([Click Here](#) for directory)



***Producing and Selling Credits in
Maryland's Nutrient Trading
Market***

**Guidance for Agricultural Producers
and Land Owners**

